Listing of Claims

1. (Currently amended) A method for identifying a compound that inhibits angiogenesis, the method comprising:

assaying *in vitro* kinase activity of an Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4 in the presence of the compound, wherein the Axl polypeptide has kinase activity in the absence of said compound; ~~and~~

performing a cell-based assay in an endothelial cell comprising said Axl polypeptide in the presence of the compound, which assay produces an angiogenesis phenotype in said endothelial cell in the absence of the compound[[,]]; and

identifying a compound that inhibits the *in vitro* kinase activity of the Axl polypeptide and that inhibits the angiogenesis phenotype in the cell-based assay,

wherein inhibition of the *in vitro* kinase activity of the Axl polypeptide in the presence of the compound and inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

2-11. (Canceled)

12. (Previously presented) The method of claim l, wherein the angiogenesis phenotype is $\alpha v\beta 3$ expression, tube formation or haptotaxis.

13. (Canceled)

14. (Previously presented) The method of claim 1, wherein the polypeptide is recombinant.

15. (Previously presented) The method of claim 1, wherein the compound is an antibody.

16. (Previously presented) The method of claim 1, wherein the compound is an antisense molecule.

17. (Previously presented) The method of claim 1, wherein the compound is an RNAi molecule.

18. (Previously presented) The method of claim 1, wherein the compound is a small organic molecule.

19-26. (Canceled)

27. (Currently amended) An *in vitro* method for identifying a compound that inhibits angiogenesis, the method comprising:

contacting the compound with an endothelial cell that expresses a recombinant Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4, wherein the Axl polypeptide has kinase activity in the absence of said compound; ~~and~~

performing a cell-based assay, which assay produces an angiogenesis phenotype in said endothelial cell in the absence of the compound[[,]]; and

identifying a compound that inhibits the angiogenesis phenotype in the cell-based assay,

wherein inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

28-40. (Canceled)

41. (Previously presented) The method of claim 27, wherein the compound is an antibody.

42. (Previously presented) The method of claim 27, wherein the compound is an antisense molecule.

43. (Previously presented) The method of claim 27, wherein the compound is an RNAi molecule.

44. (Previously presented) The method of claim 27, wherein the compound is a small organic molecule.

45-53. (Canceled)

54. (Previously presented) The method of claim 1 or 27, wherein the Axl polypeptide comprises SEQ ID NO: 4.

55. (Previously presented) The method of claim 1, wherein inhibition of the angiogenesis phenotype in the cell-based assay is caused by down regulation of expression of the Axl polypeptide.

56. (Currently amended) A method for identifying a compound that inhibits angiogenesis, the method comprising:

contacting the compound with a cell expressing a recombinant Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4, wherein the Axl polypeptide has kinase activity in the absence of said compound; ~~and~~

assaying the kinase activity of the Axl polypeptide[[,]]; and

identifying a compound that inhibits the kinase activity of the Axl polypeptide,

wherein inhibition of the kinase activity of the Axl polypeptide in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

57. (Previously presented) The method of claim 56, wherein the compound is an antibody.

58. (Previously presented) The method of claim 56, wherein the compound is an antisense molecule.

59. (Previously presented) The method of claim 56, wherein the compound is an RNAi molecule.

60. (Previously presented) The method of claim 56, wherein the compound is a small organic molecule.

61. (Previously presented) The method of claim 56, wherein the Axl polypeptide comprises SEQ ID NO: 4.

62. (New) A method for identifying a compound that inhibits angiogenesis, the method comprising:

assaying *in vitro* kinase activity of an Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4 in the presence of the compound, wherein the Axl polypeptide has kinase activity in the absence of said compound;

performing a cell-based assay in an endothelial cell comprising said Axl polypeptide in the presence of the compound, which assay produces an angiogenesis phenotype selected from the group consisting of $\alpha v\beta 3$ expression, tube formation, and haptotaxis in said endothelial cell in the absence of the compound; and

identifying a compound that inhibits the *in vitro* kinase activity of the Axl polypeptide and inhibits the angiogenesis phenotype in the cell-based assay,

wherein inhibition of the *in vitro* kinase activity of the Axl polypeptide in the presence of the compound and inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

63. (New) An *in vitro* method for identifying a compound that inhibits angiogenesis, the method comprising:

contacting the compound with an endothelial cell that expresses a recombinant Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4, wherein the Axl polypeptide has kinase activity in the absence of said compound;

performing a cell-based assay, which assay produces an angiogenesis phenotype selected

from the group consisting of $\alpha v\beta 3$ expression, tube formation, and haptotaxis in said endothelial cell in the absence of the compound; and

identifying a compound that inhibits the angiogenesis phenotype in the cell-based assay,

wherein inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.